Uptake of GCSE subjects 2014

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Introduction

This report looks at the uptake of GCSE (and IGCSE) subjects in England in 2014. The data for these analyses were taken from the National Pupil Database (NPD). This is a database held by the Department for Education, consisting of results for all students in all subjects in schools and colleges in England, as well as pupil and school background characteristics such as age, gender, ethnicity and level of deprivation.

For the analysis of uptake at GCSE the Key Stage 4 (KS4) extract of the NPD was used, consisting of all students who were at the end of KS4 in 2014 (i.e. in year 11). Uptake in this report is defined as the percentage of these students taking a GCSE in the subject, and includes exams taken by these students in previous years. Only accredited IGCSEs were counted in this report as non-accredited qualifications are no longer included in the NPD extract.

Table 1 presents a breakdown of the number of GCSEs taken by students.

Table 1: Number of GCSEs taken (% of GCSE students)

Number of GCSEs	Percentage
1	1.4
2	1.8
3	3.0
4	4.5
5	6.1
6	8.1
7	10.5
8	13.4
9	18.3
10	18.3
11	10.0
12+	4.5
No of candidates	596,258

Uptake of GCSEs in this report is presented by different student classifications: gender, school type, prior attainment, school gender and deprivation level. In the following tables the numbers of students in each of the classifications are presented.

School type

There are several different types of school where students study for GCSEs. For this report these were classified into five groups. Table 2 presents the number and percentage of GCSE students attending each school type.

Table 2: GCSE students by school type

School type	Number of students	Percentage
Academy	235,758	39.6
Comprehensive	285,368	47.9
Grammar	10,321	1.7
Independent	49,350	8.3
Secondary Modern	14,643	2.5

Pupil attainment

Students were classified by their attainment at GCSE. GCSE grades were converted into scores (A* = 8, A= 7, B= 6 etc) and a mean GCSE was calculated for each student, which was then used to divide students up into three approximately equally sized attainment groups: low, medium and high. Table 3 presents the number in each group as well as the mean, minimum and maximum value of mean GCSE for each group.

Table 3: GCSE students by attainment

Pupils' attainment group	Number of students	Minimum	Maximum	Mean
Low	197,744	1.0	4.4	3.4
Medium	196,035	4.4	5.7	5.1
High	199,495	5.7	8.0	6.6

Deprivation level

The level of deprivation that a student experiences was measured by the Income Deprivation Affecting Children Index (IDACI). This is a measure of the proportion of children in a very small geographical area (Lower Layer Super Output Area or LSOA) who live in families that are income deprived. It varies between 0 and 1, with 0 representing minimum deprivation and 1 maximum deprivation.

It should be noted that there was some missing data for this measure (almost 9% of students had no record). Students who did have a measure of deprivation were divided up into three equally sized groups. Table 4 presents the number of students and the mean, minimum and maximum IDACI values in each group.

Table 4: GCSE students by deprivation level

Pupils' deprivation group	Number of students	Minimum	Maximum	Mean
Low	181,098	0.00	0.10	0.06
Medium	181,088	0.10	0.26	0.17
High	181,095	0.26	0.99	0.42

School gender

The school gender variable was determined by the female ratio (number of females over the total number of students) in the school. If this ratio was greater than 0.95, the school was considered to be a "Girls" school. If the female ratio was less than 0.05, then the school was designated a "Boys" school. The rest of the schools were considered "Mixed" schools. Table 5 shows the numbers and percentages of students attending the different types of schools.

Table 5: GCSE students by school gender

School gender	Number of students	Percentage
Boys school	31,396	5.3
Girls school	46,207	7.7
Mixed school	518,655	87.0

Number of GCSEs taken

The number of GCSEs taken by students in each of the classifications is presented in Tables 6-9. For example, Table 6 shows that 19.2% of students in Academies took 10 GCSEs, compared with 40.0% of students in grammar schools. Table 7 shows that 10.0% of students with low attainment took 9 GCSEs, compared with 18.4% of students with high attainment.

Table 6: Number of GCSEs taken, by school type (% of students)

Number of GCSEs	Acad	Comp	Grammar	Ind	Sec Mod
1	1.1	1.2	0.3	3.2	1.3
2	1.5	1.5	0.1	5.0	1.8
3	2.6	2.4	0.2	8.8	2.6
4	3.9	4.1	0.1	10.7	5.0
5	5.7	5.8	0.2	10.6	7.9
6	7.7	8.2	0.5	9.9	12.7
7	9.9	10.9	1.8	11.8	15.9
8	13.3	14.4	3.0	10.1	16.9
9	17.9	19.8	12.8	13.5	16.2
10	19.2	18.4	40.0	11.4	11.7
11	11.8	9.3	25.8	3.7	5.9
12+	5.4	4.1	15.1	1.6	2.3
Number of students	235,758	285,368	10,321	49,350	14,643

Table 7: Number of GCSEs taken, by attainment (% of students)

Number of GCSEs	Low	Medium	High
1	2.0	0.4	0.8
2	3.5	0.5	1.0
3	6.2	0.8	1.7
4	9.7	1.8	2.1
5	13.4	2.9	2.1
6	16.2	6.2	2.0
7	17.4	10.6	3.8
8	14.8	18.6	7.2
9	10.0	26.8	18.4
10	5.0	19.9	30.2
11	1.3	8.3	20.4
12+	0.4	3.1	10.2
Number of students	197,744	196,035	199,495

Table 8: Number of GCSEs taken, by deprivation level (%of students)

Number of GCSEs	Low	Medium	High
1	0.3	0.6	1.1
2	0.5	1.1	2.0
3	1.1	2.2	3.8
4	2.1	3.9	6.0
5	3.4	5.8	8.1
6	5.2	8.3	10.6
7	8.0	11.0	12.5
8	12.7	14.4	14.5
9	21.2	19.0	16.4
10	24.6	18.7	14.2
11	14.5	10.4	7.1
12+	6.3	4.8	3.6
Number of students	181,098	181,088	181,095

Table 9: Number of GCSEs taken, by school gender (%)

Number of GCSEs	Boys school	Girls school	Mixed school
1	1.6	1.2	1.4
2	3.1	1.6	1.7
3	5.2	2.3	2.9
4	5.3	3.0	4.6
5	5.7	4.2	6.3
6	5.7	5.9	8.5
7	7.5	7.8	10.9
8	9.0	9.9	14.0
9	13.9	17.7	18.6
10	22.9	24.7	17.5
11	13.9	15.9	9.2
12+	6.3	5.8	4.3
Number of students	31,396	46,207	518,655

Uptake of individual GCSE subjects

In the following tables the uptake of individual subjects is presented, broken down into the classifications outlined above. Subjects with an overall uptake level of less than 1% are not included. In each table the subjects are ordered by overall uptake (highest first). Thus, mathematics had the highest level of uptake, being taken by 93.1% of all GCSE students, 92.7% of males and 93.5% of females.

It is worth noting that the expectation is that virtually all pupils take some core subjects, such as English, mathematics and science. However, there are alternatives to GCSEs in these subjects which are increasingly popular, such as (unaccredited) IGCSEs, BTECs and OCR Nationals (particularly in science). This means that the percentages for these subjects are reduced somewhat in these tables. For a detailed analysis of uptake of alternative qualifications in English schools see Gill (2013).

Table 10: Uptake of individual subjects by gender (% of students)

Subject	Boys	Girls	All
Mathematics	92.7	93.5	93.1
English Language	74.9	81.6	78.2
English Literature	74.1	81.6	77.8
Science (Core)	59.0	61.8	60.3
Additional Science	43.7	47.6	45.6
Religious Studies	39.6	46.7	43.1
History	39.2	42.1	40.6
Geography	37.7	33.2	35.5
French	23.2	31.5	27.3
Biology	24.4	24.0	24.2
Chemistry	23.8	23.2	23.5
Physics	23.7	23.0	23.4
English Language & Literature	22.6	16.5	19.6
Physical Education/Sports Studies	22.3	11.8	17.1
Spanish	12.7	16.9	14.8
Information & Communications Technology	16.0	12.3	14.2
Art & Design	9.0	19.0	13.9
Business Studies: Single	13.7	9.9	11.9
Drama & Theatre Studies	9.0	14.8	11.8
German	9.5	10.5	10.0
Media/Film/TV Studies	8.9	8.8	8.9
D&T Resistant Materials	14.7	2.6	8.7
Art & Design (Fine Art)	5.6	11.7	8.6
Statistics	8.5	7.7	8.1
Music	6.9	7.3	7.1
D&T Food Technology	4.9	8.6	6.7
D&T Product Design	8.5	3.6	6.1
D&T Graphic Products	6.9	4.4	5.7
D&T Textiles Technology	0.3	8.3	4.3
Further additional science	3.5	3.5	3.5
Sociology	2.0	4.9	3.4
Social Science: Citizenship	2.9	3.7	3.3
Art & Design (Photography)	2.3	4.1	3.2
Home Economics: Child Development	0.1	6.1	3.1
Computer Studies/Computing	4.4	0.8	2.6
Methods in Mathematics	2.7	2.5	2.6
Applications of Mathematics	2.5	2.4	2.4
Office Technology	2.6	2.2	2.4
Psychology	1.5	3.2	2.4
Dance	0.3	3.7	1.9
Humanities: Single	1.6	1.6	1.6
Home Economics: Food	1.1	2.0	1.5
Latin	1.4	1.5	1.5
General Studies	1.4	1.4	1.4
D&T Electronic Products	2.5	0.2	1.4
Art & Design (Textiles)	0.1	2.6	1.3
Art & Design (Graphics)	1.4	1.1	1.3
Film Studies	1.2	1.0	1.1

Table 11: Uptake of individual subjects by school type (% of students)

Subject	Academy	Comprehensive	Grammar	Independent	Secondary Modern
Mathematics	96.7	96.8	95.1	53.3	96.6
English Language	81.2	80.1	98.2	49.7	79.2
English Literature	80.8	79.5	98.0	50.6	77.3
Science (Core)	61.7	65.2	32.5	28.6	72.1
Additional Science	46.0	49.8	27.1	22.7	49.7
Religious Studies	40.8	46.5	47.1	34.4	41.0
History	41.1	39.1	55.7	46.7	33.2
Geography	35.4	33.9	51.8	44.0	29.3
French	27.9	26.1	39.8	31.7	19.0
Biology	25.5	20.8	70.3	31.6	14.6
Chemistry	24.8	20.2	70.0	29.8	13.9
Physics	24.8	20.1	70.0	28.9	13.4
English Language & Literature	20.6	21.4	1.3	6.5	24.7
Physical Education/Sports Studies	17.7	17.4	18.2	13.6	14.3
Spanish	14.8	13.6	30.6	20.0	11.0
Information & Communications Technology	13.5	15.3	21.7	9.6	13.4
Art & Design	13.7	14.5	10.8	12.8	13.1
Business Studies: Single	13.0	11.7	19.7	7.6	7.1
Drama & Theatre Studies	11.7	11.6	12.5	14.9	8.1
German	11.3	8.7	27.4	10.1	2.1
Media/Film/TV Studies	9.6	9.8	4.5	1.8	7.3
D&T Resistant Materials	8.4	8.7	7.6	9.9	10.8
Art & Design (Fine Art)	8.4	8.2	11.5	12.3	6.6
Statistics	9.0	7.6	12.1	4.4	12.1
Music	7.0	6.7	11.5	10.4	4.5
D&T Food Technology	7.3	7.2	6.5	1.8	5.8
D&T Product Design	6.7	6.0	8.4	3.7	4.5
D&T Graphic Products	5.6	6.3	7.7	2.0	4.6
D&T Textiles Technology	4.3	4.7	5.2	1.4	3.7
Further additional science	3.4	4.2	0.8	0.9	3.0
Sociology	3.6	3.9	1.6	0.2	3.6
Social Science: Citizenship	3.4	3.6	1.6	1.0	3.4
Art & Design (Photography)	3.1	3.5	0.6	1.6	6.1
Home Economics: Child Development	3.4	3.3	0.1	0.4	2.6
Computer Studies/Computing	3.3	2.2	6.8	1.5	1.1
Methods in Mathematics	3.1	2.3	4.6	1.7	1.9
Applications of Mathematics	2.8	2.2	4.6	1.8	1.9
Office Technology	2.5	2.4	1.2	2.1	2.9
Psychology	2.6	2.4	3.3	0.7	3.3
Dance	2.2	2.0	1.2	0.8	1.8
Humanities: Single	1.8	1.7	0.0	0.6	1.5
Home Economics: Food	1.5	1.4	2.1	2.6	1.6
Latin	0.6	0.2	4.2	12.6	0.4
General Studies	1.3	1.6	1.1	0.5	1.9
D&T Electronic Products	1.6	1.3	2.4	1.0	0.9
Art & Design (Textiles)	1.4	1.2	1.0	1.2	1.5
Art & Design (Graphics)	1.4	1.3	0.3	0.7	1.5
Film Studies	1.4	1.0	0.1	0.1	1.3

Table 12: Uptake of individual subjects by attainment (% of students)

Subject	Low attainment	Medium attainment	High attainment
Mathematics	96.1	96.4	87.4
English Language	64.7	83.8	87.1
English Literature	61.7	84.2	88.4
Science (Core)	61.5	74.8	45.5
Additional Science	33.4	63.9	40.5
Religious Studies	32.3	45.7	51.9
History	24.3	42.4	55.7
Geography	21.9	37.2	47.8
French	10.5	28.4	43.3
Biology	3.8	18.3	50.5
Chemistry	3.0	17.6	50.0
Physics	3.0	17.5	49.7
English Language & Literature	37.9	16.7	4.2
Physical Education/Sports Studies	14.2	20.5	16.9
Spanish	5.8	15.2	23.5
Information & Communications Technology	12.0	16.0	14.8
Art & Design	13.6	14.9	13.4
Business Studies: Single	8.5	14.2	13.1
Drama & Theatre Studies	9.5	12.8	13.3
German	3.1	9.7	17.3
Media/Film/TV Studies	9.7	10.7	6.3
D&T Resistant Materials	11.4	8.8	6.0
Art & Design (Fine Art)	7.4	8.6	9.9
Statistics	5.0	8.4	10.9
Music	3.8	6.4	11.2
D&T Food Technology	8.3	7.1	4.9
D&T Product Design	7.0	6.4	4.9
D&T Graphic Products	5.5	6.3	5.3
D&T Textiles Technology	3.7	4.6	4.4
Further additional science	0.4	3.1	7.0
Sociology	2.9	4.2	3.2
Social Science: Citizenship	3.5	3.8	2.7
Art & Design (Photography)	3.7	3.8	2.1
Home Economics: Child Development	4.7	3.4	1.2
Computer Studies/Computing	1.5	2.8	3.6
Methods in Mathematics	2.2	2.5	3.1
Applications of Mathematics	1.9	2.4	3.0
Office Technology	2.4	2.8	2.0
Psychology	1.4	2.7	2.9
Dance	1.6	2.3	2.0
Humanities: Single	2.0	1.8	1.1
Home Economics: Food	1.7	1.6	1.3
Latin	0.0	0.2	4.2
General Studies	1.7	1.4	1.0
D&T Electronic Products	1.2	1.5	1.5
Art & Design (Textiles)	1.3	1.5	1.2
Art & Design (Graphics)	1.3	1.4	1.0
Film Studies	1.4	1.3	0.6

Table 13: Uptake of individual subjects by deprivation group (% of students)

Subject	Low deprivation	Medium deprivation	High deprivation
Mathematics	97.1	96.8	97.3
English Language	87.6	81.6	75.3
English Literature	87.3	81.0	74.7
Science (Core)	62.2	64.4	63.6
Additional Science	50.4	49.1	44.9
Religious Studies	44.8	43.0	44.9
History	46.6	40.8	34.2
Geography	41.7	35.1	28.4
French	32.8	26.7	22.0
Biology	32.5	23.2	15.6
Chemistry	32.0	22.6	14.9
Physics	32.0	22.5	14.8
English Language & Literature	13.9	20.7	27.8
Physical Education/Sports Studies	21.5	17.7	13.6
Spanish	16.6	13.7	13.2
Information & Communications Technology	14.1	14.2	15.7
Art & Design	13.6	14.4	14.5
Business Studies: Single	15.2	12.0	9.9
Drama & Theatre Studies	12.9	11.7	10.4
German	14.7	9.9	5.7
Media/Film/TV Studies	9.0	10.0	9.7
D&T Resistant Materials	9.0	9.3	7.7
Art & Design (Fine Art)	9.2	8.6	7.2
Statistics	8.7	8.8	8.2
Music	8.7	6.9	5.1
D&T Food Technology	7.8	7.5	6.4
D&T Product Design	6.2	6.3	6.5
D&T Graphic Products	6.7	6.2	5.2
D&T Textiles Technology	4.8	4.5	4.3
Further additional science	4.1	3.7	3.5
Sociology	3.2	3.5	4.5
Social Science: Citizenship	2.6	3.4	4.6
Art & Design (Photography)	3.1	3.8	3.3
Home Economics: Child Development	2.7	3.6	3.6
Computer Studies/Computing	3.2	2.7	2.4
Methods in Mathematics	3.0	3.0	2.1
Applications of Mathematics	2.9	2.9	1.9
Office Technology	2.3	2.5	2.6
Psychology	2.5	2.6	2.5
Dance	2.4	2.2	1.6
Humanities: Single	1.5	1.8	2.0
Home Economics: Food	1.5	1.5	1.3
Latin	0.8	0.4	0.2
General Studies	1.5	1.6	1.4
D&T Electronic Products	1.8	1.5	1.1
Art & Design (Textiles)	1.3	1.4	1.4
Art & Design (Graphics)	1.4	1.3	1.3
Film Studies	0.9	1.1	1.5

Table 14: Uptake of individual subjects by school gender (% of students)

Subject	Boys School	Girls School	Mixed School
Mathematics	79.4	86.4	94.5
English Language	73.3	83.3	78.1
English Literature	74.0	83.1	77.6
Science (Core)	41.7	50.4	62.4
Additional Science	32.4	41.1	46.8
Religious Studies	49.4	58.1	41.4
History	47.1	47.7	39.6
Geography	44.9	40.5	34.5
French	30.9	35.8	26.3
Biology	37.7	35.6	22.4
Chemistry	36.9	34.9	21.7
Physics	37.2	34.7	21.5
English Language & Literature	12.0	8.0	21.1
Physical Education/Sports Studies	16.8	10.1	17.7
Spanish	19.0	24.3	13.7
Information & Communications Technology	15.0	14.9	14.1
Art & Design	8.1	14.4	14.2
Business Studies: Single	14.0	9.2	12.0
Drama & Theatre Studies	8.8	17.2	11.5
German	13.4	12.5	9.6
Media/Film/TV Studies	5.5	5.6	9.4
D&T Resistant Materials	12.9	2.5	9.0
Art & Design (Fine Art)	10.1	12.5	8.2
Statistics	9.2	6.3	8.2
Music	8.9	9.4	6.8
D&T Food Technology	2.0	6.5	7.0
D&T Product Design	7.2	4.4	6.2
D&T Graphic Products	5.1	3.9	5.8
D&T Textiles Technology	0.0	7.6	4.2
Further additional science	2.7	3.7	3.5
Sociology	0.2	4.8	3.5
Social Science: Citizenship	2.7	6.2	3.1
Art & Design (Photography)	1.9	1.9	3.4
Home Economics: Child Development	0.0	3.4	3.2
Computer Studies/Computing	6.2	1.1	2.5
Methods in Mathematics	3.9	1.9	2.6
Applications of Mathematics	3.6	1.9	2.4
Office Technology	1.8	2.5	2.4
Psychology	1.1	2.3	2.4
Dance	0.1	3.0	1.9
Humanities: Single	0.5	0.1	1.8
Home Economics: Food	0.5	2.2	1.5
Latin	7.5	6.0	0.7
General Studies	0.7	0.5	1.5
D&T Electronic Products	2.7	0.1	1.4
Art & Design (Textiles)	0.0	2.3	1.3
Art & Design (Graphics)	1.1	0.8	1.3
Film Studies	0.3	0.4	1.2

Reference

Gill, T. (2013). *Uptake of level 2 qualifications in English schools 2008-2012. Statistics Report Series No.61*. Cambridge Assessment. Available at: http://www.cambridgeassessment.org.uk/our-research/all-published-resources/statistical-reports/